

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

**REMARKS**

The Office Action dated April 12, 2003, has been reviewed in detail and the application has been amended in the sincere effort to place the same in condition for allowance. Reconsideration of the application and allowance in its amended form are requested based on the following remarks.

Applicants retain the right to pursue broader claims under 35 U.S.C. §120.

Applicants have provided a unique solution with respect to problems regarding FLAT FLOAT GLASS. Applicants' solution is now claimed in a manner that satisfies the requirements of 35 U.S.C. §102.

**New Claims:**

Claims 32-44 have been canceled herein, without prejudice, thereby rendering the rejections against these claims moot. Claims 45-64 are newly-presented herein. The prior art applied against Claims 32-44, specifically U.S. Patent 3,809,543 to Gaskell et al., U.S. Patent 5,446,008 to Krolla et al., U.S. Patent 5,070,045 to

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

Comte et al., and U.S. Patent 4,835,121 to Shibuya et al., will be discussed herein below with respect to the newly-presented claims.

**Rejection Under 35 U.S.C. §102 in view of Gaskell:**

Gaskell, as understood, discloses a method of manufacturing glass ceramic material utilizing molten glass floated on a tin bath of molten metal. Gaskell, as understood, does not discuss levels of concentration of platinum or rhodium in either the floated glass or the glass ceramic material manufactured from the floated glass. Gaskell further does not disclose the molten glass or glass ceramic as containing platinum or rhodium.

In contrast to Gaskell, Claim 45 recites:

A flat float glass comprising:  
platinum, rhodium, zinc oxide, and tin dioxide, wherein:  
the concentration of said platinum is less than 300 parts  
per billion;  
the concentration of said rhodium is less than 30 parts per  
billion;  
the concentration of said zinc oxide is less than 1.5 weight  
percent;  
the concentration of said tin dioxide is less than 1 weight  
percent;  
said concentrations of said platinum, said rhodium, said  
zinc oxide, and said tin dioxide configuring said flat float glass  
to have minimized surface defects; and  
said flat float glass being configured to be one of:  
prestressable into a glass-ceramic comprising one of:  
high quartz mixed crystals; and

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

keatite mixed crystals; and  
transformable into a glass-ceramic comprising one of:  
high quartz mixed crystals; and  
keatite mixed crystals.

In view of the above, it is respectfully submitted that Gaskell does not disclose the limitations of Claim 45, and thus does not anticipate Claim 45, which claim is therefore believed to be allowable. It is further respectfully submitted that Gaskell does not disclose the limitations of Claims 46-52, and thus does not anticipate Claims 46-52, which claims are also believed to be allowable. Claims 46-52 are further believed to be allowable based on their dependence from Claim 45.

Also in contrast to Gaskell, Claim 53 recites:

A glass ceramic comprising:  
platinum, rhodium, zinc oxide, and tin dioxide, wherein:  
the concentration of said platinum is less than 300 parts  
per billion;  
the concentration of said rhodium is less than 30 parts per  
billion;  
the concentration of said zinc oxide is less than 1.5 weight  
percent;  
the concentration of said tin dioxide is less than 1 weight  
percent; and  
said glass ceramic comprising one of:  
high quartz mixed crystals; and  
keatite mixed crystals.

In view of the above, it is respectfully submitted that Gaskell does not disclose the limitations of Claim 53, and thus does not

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

anticipate Claim 53, which claim is therefore believed to be allowable. It is further respectfully submitted that Gaskell does not disclose the limitations of Claims 54-56, and thus does not anticipate Claims 54-56, which claims are also believed to be allowable. Claims 54-56 are further believed to be allowable based on their dependence from Claim 53.

Also in contrast to Gaskell, Claim 57 recites:

A float glass comprising:  
platinum, wherein the concentration of said platinum is less than 300 parts per billion;  
a concentration of rhodium less than 30 parts per billion;  
a concentration of zinc oxide less than 1.5 weight percent;  
a concentration of tin dioxide less than 1 weight percent;  
said concentrations of said platinum, rhodium, zinc oxide, and tin dioxide configuring said float glass to have minimized surface defects; and  
said float glass being configured to be one of:  
prestressable into a glass-ceramic comprising one of:  
high quartz mixed crystals; and  
keatite mixed crystals; and  
transformable into a glass-ceramic comprising one of:  
high quartz mixed crystals; and  
keatite mixed crystals.

In view of the above, it is respectfully submitted that Gaskell does not disclose the limitations of Claim 57, and thus does not anticipate Claim 57, which claim is therefore believed to be allowable. It is further respectfully submitted that Gaskell does not disclose the limitations of Claims 58-60, and thus does not anticipate Claims 58-

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

60, which claims are also believed to be allowable. Claims 58-60 are further believed to be allowable based on their dependence from Claim 57.

Also in contrast to Gaskell, Claim 62 recites:

A flat glass ceramic comprising:  
platinum, wherein the concentration of said platinum is less than 300 parts per billion;  
a concentration of rhodium less than 30 parts per billion;  
a concentration of zinc oxide less than 1.5 weight percent;  
a concentration of tin dioxide less than 1 weight percent;  
and  
said flat glass ceramic comprising one of:  
high quartz mixed crystals; and  
keatite mixed crystals.

In view of the above, it is respectfully submitted that Gaskell does not disclose the limitations of Claim 62, and thus does not anticipate Claim 62, which claim is therefore believed to be allowable. It is further respectfully submitted that Gaskell does not disclose the limitations of Claims 62-64, and thus does not anticipate Claims 63-64, which claims are also believed to be allowable. Claims 63-64 are further believed to be allowable based on their dependence from Claim 62.

In view of the above, reconsideration and withdrawal of the present rejection is respectfully requested.

Docket No. NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

**Rejection Under 35 U.S.C. §102 in view of Krolla:**

Krolla, as understood, discloses a transparent or translucent inorganic material, such as a glass-ceramic material, which can be used in glass-ceramic cook tops. The material in Krolla is designed to improve the conductivity of heat from the heating element to the cookware being heated, as well as maintain or improve the visibility of the heating element through the glass-ceramic cook top when heated. The inorganic material has a particular glass composition as disclosed in the abstract and the examples of Krolla. Krolla, as understood, does not discuss levels of concentration of platinum, rhodium, or tin dioxide in the inorganic material. Krolla further does not disclose the inorganic material as containing platinum, rhodium, or tin dioxide.

Claim 45 is recited above. In view of the above, it is respectfully submitted that Krolla does not disclose the limitations of Claim 45, and thus does not anticipate Claim 45, which claim is therefore believed to be allowable. It is further respectfully submitted that Krolla does not disclose the limitations of Claims 46-52, and thus does not anticipate Claims 46-52, which claims are also believed to

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

be allowable. Claims 46-52 are further believed to be allowable based on their dependence from Claim 45.

Claim 53 is recited above. In view of the above, it is respectfully submitted that Krolla does not disclose the limitations of Claim 53, and thus does not anticipate Claim 53, which claim is therefore believed to be allowable. It is further respectfully submitted that Krolla does not disclose the limitations of Claims 54-56, and thus does not anticipate Claims 54-56, which claims are also believed to be allowable. Claims 54-56 are further believed to be allowable based on their dependence from Claim 53.

Claim 57 is recited above. In view of the above, it is respectfully submitted that Krolla does not disclose the limitations of Claim 57, and thus does not anticipate Claim 57, which claim is therefore believed to be allowable. It is further respectfully submitted that Krolla does not disclose the limitations of Claims 58-60, and thus does not anticipate Claims 58-60, which claims are also believed to be allowable. Claims 58-60 are further believed to be allowable based on their dependence from Claim 57.

Claim 62 is recited above. In view of the above, it is respectfully submitted that Krolla does not disclose the limitations of

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

Claim 62, and thus does not anticipate Claim 62, which claim is therefore believed to be allowable. It is further respectfully submitted that Krolla does not disclose the limitations of Claims 62-64, and thus does not anticipate Claims 63-64, which claims are also believed to be allowable. Claims 63-64 are further believed to be allowable based on their dependence from Claim 62.

In view of the above, reconsideration and withdrawal of the present rejection is respectfully requested.

**Rejection Under 35 U.S.C. §102 in view of Comte:**

Comte, as understood, discloses the preparation of transparent glass-ceramic articles which preferably exhibit a minimal distortion, especially glass-ceramic cook top plates. The material in Comte is designed to improve crystal growth in the glass during preparation of the glass, while minimizing distortion of the finished glass-ceramic article. The minimization of distortions is to improve the conductivity of heat from the heating element to the cookware being heated, as well as maintain visibility of the heating element through the glass-ceramic cook top when heated. The composition of the glass is disclosed in the abstract and the examples of Comte. Comte, as



Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

understood, does not discuss levels of concentration of platinum, rhodium, or tin dioxide in the glass. Comte further does not disclose the glass as containing platinum, rhodium, or tin dioxide.

Claim 45 is recited above. In view of the above, it is respectfully submitted that Comte does not disclose the limitations of Claim 45, and thus does not anticipate Claim 45, which claim is therefore believed to be allowable. It is further respectfully submitted that Comte does not disclose the limitations of Claims 46-52, and thus does not anticipate Claims 46-52, which claims are also believed to be allowable. Claims 46-52 are further believed to be allowable based on their dependence from Claim 45.

Claim 53 is recited above. In view of the above, it is respectfully submitted that Comte does not disclose the limitations of Claim 53, and thus does not anticipate Claim 53, which claim is therefore believed to be allowable. It is further respectfully submitted that Comte does not disclose the limitations of Claims 54-56, and thus does not anticipate Claims 54-56, which claims are also believed to be allowable. Claims 54-56 are further believed to be allowable based on their dependence from Claim 53.

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

Claim 57 is recited above. In view of the above, it is respectfully submitted that Comte does not disclose the limitations of Claim 57, and thus does not anticipate Claim 57, which claim is therefore believed to be allowable. It is further respectfully submitted that Comte does not disclose the limitations of Claims 58-60, and thus does not anticipate Claims 58-60, which claims are also believed to be allowable. Claims 58-60 are further believed to be allowable based on their dependence from Claim 57.

Claim 62 is recited above. In view of the above, it is respectfully submitted that Comte does not disclose the limitations of Claim 62, and thus does not anticipate Claim 62, which claim is therefore believed to be allowable. It is further respectfully submitted that Comte does not disclose the limitations of Claims 62-64, and thus does not anticipate Claims 63-64, which claims are also believed to be allowable. Claims 63-64 are further believed to be allowable based on their dependence from Claim 62.

In view of the above, reconsideration and withdrawal of the present rejection is respectfully requested.

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

**Rejection Under 35 U.S.C. §102 in view of Shibuya:**

Shibuya, as understood, discloses an infrared transparent glass ceramic article which can be used in glass ceramic cook tops. The glass ceramic in Shibuya is designed to have a black appearance to avoid the problems associated with white clouded glass ceramic, such as reduced infrared heat transmittance and reduced visibility of the heating element through the glass-ceramic cook top when heated.

The glass used has a particular glass composition as disclosed in the abstract and the examples of Shibuya. Shibuya, as understood, does not discuss levels of concentration of platinum, rhodium, or tin dioxide in the glass. Shibuya further does not disclose the glass as containing platinum, rhodium, or tin dioxide.

Claim 45 is recited above. In view of the above, it is respectfully submitted that Shibuya does not disclose the limitations of Claim 45, and thus does not anticipate Claim 45, which claim is therefore believed to be allowable. It is further respectfully submitted that Shibuya does not disclose the limitations of Claims 46-52, and thus does not anticipate Claims 46-52, which claims are also believed to be allowable. Claims 46-52 are further believed to be allowable based on their dependence from Claim 45.

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

Claim 53 is recited above. In view of the above, it is respectfully submitted that Shibuya does not disclose the limitations of Claim 53, and thus does not anticipate Claim 53, which claim is therefore believed to be allowable. It is further respectfully submitted that Shibuya does not disclose the limitations of Claims 54-56, and thus does not anticipate Claims 54-56, which claims are also believed to be allowable. Claims 54-56 are further believed to be allowable based on their dependence from Claim 53.

Claim 57 is recited above. In view of the above, it is respectfully submitted that Shibuya does not disclose the limitations of Claim 57, and thus does not anticipate Claim 57, which claim is therefore believed to be allowable. It is further respectfully submitted that Shibuya does not disclose the limitations of Claims 58-60, and thus does not anticipate Claims 58-60, which claims are also believed to be allowable. Claims 58-60 are further believed to be allowable based on their dependence from Claim 57.

Claim 62 is recited above. In view of the above, it is respectfully submitted that Shibuya does not disclose the limitations of Claim 62, and thus does not anticipate Claim 62, which claim is therefore believed to be allowable. It is further respectfully submitted

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

that Shibuya does not disclose the limitations of Claims 62-64, and thus does not anticipate Claims 63-64, which claims are also believed to be allowable. Claims 63-64 are further believed to be allowable based on their dependence from Claim 62.

In view of the above, reconsideration and withdrawal of the present rejection is respectfully requested.

**Art Made of Record:**

The prior art made of record and not applied has been carefully reviewed, and it is submitted that it does not, either taken singly or in any reasonable combination with the other prior art of record, defeat the patentability of the present invention or render the present invention obvious. Further, Applicants are in agreement with the Examiner that the prior art made of record and not applied does not appear to be material to the patentability of the claims currently pending in this application.

In view of the above, it is respectfully submitted that this application is in condition for allowance, and early action towards that end is respectfully requested.

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

**Leave to Delay Treatment of Formal Objections Until Allowable**

**Subject Matter is Indicated:**

In accordance with 37 C.F.R. §1.111, it is hereby respectfully requested that any objections or requirements not fully treated and set forth in the outstanding Office action that relate to form and are not necessary to further consideration of the now pending claims, be held in abeyance until allowable subject matter is indicated.

**Summary and Conclusion:**

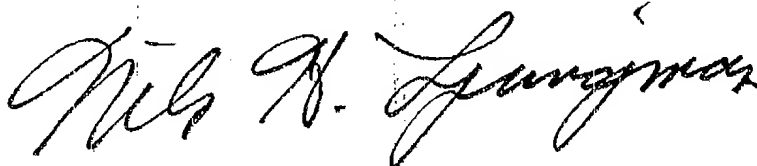
It is submitted that Applicants have provided a new and unique FLAT FLOAT GLASS. It is submitted that the claims, as amended, are fully distinguishable from the prior art. Therefore, it is requested that a Notice of Allowance be issued at an early date.

If mailed, I, the person signing this certification below, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated in the certification of mailing on the transmittal letter sent herewith, or if facsimile transmitted, I, the person signing this certification below, hereby

Docket No.: NHL-FMW-02A US(SCT)  
Serial No.: 09/829,409

certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office on the date indicated in the certification of facsimile transmission on the transmittal letter which is being facsimile transmitted herewith.

Respectfully submitted,



Nils H. Ljungman, Esq.  
Attorney for Applicant[s]  
Reg. No. 25,997  
Name of person signing certification  
Nils H. Ljungman & Associates  
P.O. Box 130  
Greensburg, PA 15601-0130  
Telephone: (724) 836-2305  
Facsimile: (724) 836-2313